

DELPHI SERIES



FEATURES

- ♦ High efficiency: 95.2% @ 9.6V 16A
- ♦ Size: 33.0mm x 22.8mm x 9.5mm (1.30"x0.90"x0.37")
- ♦ Industry standard pin out
- ♦ Fixed frequency operation
- ♦ UVLO and OVP, OTP, and OCP
- ♦ Monotonic startup into normal and pre-bias loads
- ♦ 2250V isolation
- ♦ Basic insulation
- ♦ No minimum load required
- ♦ Constant output current operation for both 12V (4:1) and 9.6V (5:1) output modules
- ♦ SMD and through-hole versions
- ♦ ISO 9001, TL 9000, ISO 14001, QS 9000, OHSAS 18001 certified manufacturing facility
- ♦ UL/cUL 60950-1 (US & Canada), and TUV (EN60950-1) -pending

Delphi Series V48SB, 1/16th Brick Bus Converter DC/DC Power Modules: 48Vin, 150W, 12Vo or 9.6Vo

The Delphi Series V48SB, 1/16th Brick sized, 48V input, single output, fixed ratio bus converters are the latest offering from a world leader in power systems technology and manufacturing — Delta Electronics, Inc. This product features an input voltage range of 38V to 55V and provides up to 150 watts of power or up to 16A (9.6Vo) of output current in an industry standard footprint and pinout. Both the 5:1 (9.6V) and 4:1 (12V) bus converters operate with constant output current from 38V to 55V input. Typical full load efficiency for both modules at 48Vin is up to 95.2%. This product represents the next generation of design technology that supports the intermediate bus architecture to power multiple downstream non-isolated point-of-load (POL) converters. With creative design technology and optimization of component placement, these converters possess outstanding electrical and thermal performance, as well as extremely high reliability under stressful operating conditions. All modules carry a full set of international safety approvals.

OPTIONS

- ♦ SMD pin

APPLICATIONS

- ♦ Datacom / Networking
- ♦ Wireless Networks
- ♦ Optical Network Equipment
- ♦ Server and Data Storage
- ♦ Industrial / Testing Equipment

SPECIFICATIONS

GENERAL SPECIFICATIONS			OUTPUT SPECIFICATIONS		
Input Voltage		38V~55V	Voltage Set Point	Typical	Vin/n
Switching	Typical	150 KHz	Total Output Range	V48SB120	8.9V~13.75V
Isolation Voltage	In/Out	2250V		V48SB9R6	6.8V~11V
Isolation	Minimum	10M Ohms	Load Regulation	Typical	390mV
MTBF	Bellcore	TBD	Load Limits	Typical	120% of load
Size	(1.30"x0.90"x0.37")	33.0x22.8x9.5mm	Ripple & Noise	Typical	150 mV
			OTP	Typical , at hotspot	131°C

PART NUMBERING SYSTEM

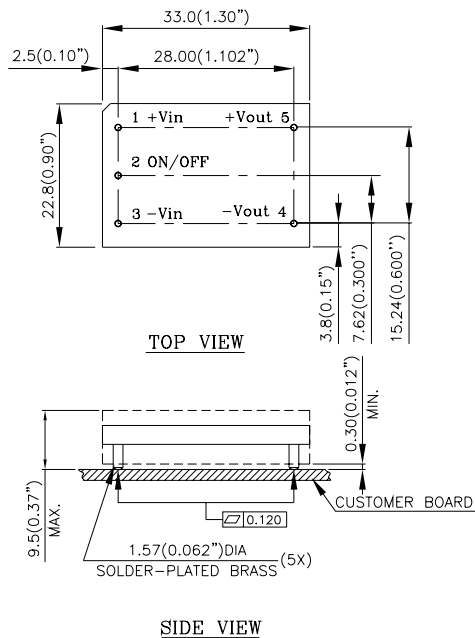
V	48	S	B	9R6	16	N	R	F	A
Type of Product	Input Voltage	Number of Outputs	Product Series	Output Voltage	Output Current	ON/OFF Logic	Pin Length		Option Code
V - 1/16th Brick	38V~55V	S - Single	B - Bus Converter	120 - 12V 9R6 - 9.6V	13 - 12.8A 16 - 16A	N - Negative	R - 0.170"	F- RoHS 6/6 (Lead Free)	A - Standard Functions

MODEL LIST

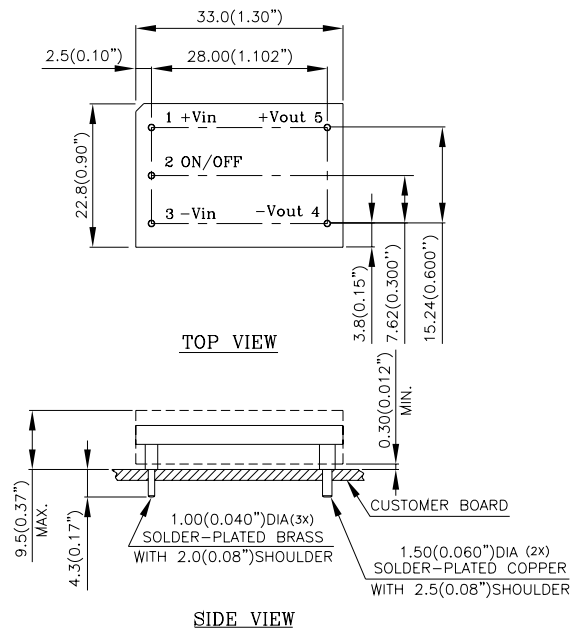
Part Number	INPUT		OUTPUT	Eff. @ 100% LOAD	
V48SB12013NRFA	38V~55V	3.8A	12V	12.8A	95.2%
V48SB9R616NRFA	38V~55V	3.8A	9.6V	16A	95.2%

MECHANICAL DRAWING

Surface-mount module



Through-hole module



NOTES:

DIMENSIONS ARE IN MILLIMETERS AND (INCHES)

TOLERANCES: X.Xmm±0.5mm(X.XX in.±0.02 in.)

X.XXmm±0.25mm(X.XXX in.±0.010 in.)

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WARRANTY

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